## REMARKS

The claims have been amended for clarity, and some have been amended to define Applicants' contribution to the art with greater particularity. The additions to claims 2, 10 and 15, and the subject matter of new claims 17-21 are based on the disclosure on page 7, line 23 – page 8, line 12 of the application as filed. The additions to claims 4 and 14 are based on the sentence bridging pages 6 and 7 of the specification.

Applicants traverse the rejection of claims 1-16 as being obvious from Spies et al. (U.S. Patent 5,689,565) in view of Schiedt et al. (U.S. Patent 6,754,820). The Office Action erroneously says Figures 1 and 2 of Spies et al., as well as the Abstract; column 5, line 21 – column 6, line 24, and column 6, lines 36 – column 7, line 28 disclose all features of claim 1, with the exception the requirement for a credential index to differ substantially from the credential. The Office Action says the admitted missing features are disclosed by Fig. 3, column 5, line 31 – column 6, line 58, and column 10, lines 10-65 of Scheidt et al.. The Office Action also erroneously says it would have been obvious to combine the references because such a combination would have provided sensitivity level or multiple-level access control such that access to credentials id dependent on the method of member identification and enforced domain authority dictated policies for multiple-level access control by credential category

Firstly, Applicants note the patent ambiguity in the discussion of the requirements of claim 1, because the roles of participants 22a and 22b are reversed in page 3, lines 4, 5, 9 and 10 of the Office Action. On lines 4 and 5, participants 22a and 22b are respectively identified as the claimed sender and recipients, but on lines 9 and 10, the claimed recipient and sender are respectively identified as 22a and 22b.

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Column 5, line 21 – column 7, line 28 of Spies indicates electronic commercial transactions between participants 22(a), 22(b), 22(c) involve one or more commerce documents and one or more commerce instruments. A commerce document defines a type of commercial transaction, e.g., purchase orders, receipts and contracts. A commercial instrument is a mode of payment, e.g., check, cash or credit card. A certified trusted authority 26, e.g., a bank, includes server 28 to provide secure exchange of documents and instruments over an insecure communications system. Server 28 and participant computers 24(a), 24(b) and 24(c) are capable of encrypting and decrypting messages, digitally signing messages and verifying the authenticity of messages form the participants.

In an initial registration phase illustrated in Fig. 1, each participant 22 seeks approval of authority 26. In the second phase of Fig. 2, participants 22 exchange documents and instruments. During the first phase, participants 22 generate and send a registration packet over paths 30 to server 28 of authority 26 that produces and sends back unique credentials 32 for and to each participant 22. The credentials are based on information in the registration packets. Authority 26 digitally sings the credentials. The credentials are used to identify and authenticate the participants during a commercial transaction, at which time an originating transaction participant 22(a) encryptically transmits to another first recipient 22b, without reference to authority 26, its credential 32 along with a document 36 and an instrument 38. First recipient 22(b) passes the credential document and instrument of participant 22(a) to a second recipient 22(c). Typically, participants 22(a), 22(b) and 22(c) are respectively a purchaser, merchant and banker.

Based on the foregoing, applicants are unable to understand the Examiner's rationale that Spies et al. discloses what is attributed to Spies et al. in the paragraph bridging pages 3 and 4 of the Office Action. Explanation is requested.

The Office Action relies on Scheidt et al. to disclose a credential index that differs from a credential. Scheidt et al. is concerned with a multi-level access system that controls a computer system object. The Office Action relies on Fig. 3, column 5, line 31 – column 6, lines 58 and column 10, lines 10-65. The only mention of credential index in the relied on portions of Scheidt et al. appears to be at column 10, lines 53-59, that says an advanced encryption algorithm (AES) key is calculated using a counter of 00000001<sub>16</sub> and a credential index. The number of chosen credentials  $S_i$  for the various multiple credential selection categories (MCSC) are desired keys that are used to encrypt  $S_i$  of the threshold shares with AES. The keys are encrypted in order, so the lowest index credential is used to encrypt the second share because the first share remains in plan text. Scheidt et al. goes on to say the threshold key for each category is used like a shared value in the computation of a random value encryption key (REK).

It is not seen how this relied on portion of Scheidt et al would be combined by one of ordinary skill in the art with the Spies et al. commerce system of Figs. 1 and 2 to arrive at the method of claim 1. Explanation is requested.

Further, the Examiner must explain why one of ordinary skill in the art would want to modify Spies et al. to include a sensitivity level or multiple access control such that access to credentials is dependent on the method of member identification and enforced domain authority dictated policies for multiple-level access control by credential category.

To reject claim 21, the Office Action says Speis et al., at Fig. 2, column 7, line 7 – column 8, line 26, discloses the recipient responding to the credential index by determining whether the at least one credential is sufficient and the recipient communicating the result of the determination to the sender. The Examiner is requested to explain how there is a disclosure in the relied on portion of Spies of a credential index. In addition, Claim 2 now more specifically defines the method by

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requiring a service provider to determine whether a credential is sufficient for the service provider to provide a service to the sender, and to communicate such a determination to the sender.

To reject claim 3, the Office action relies on column 1, lines 17 – column 8, lines 28 and column 25, lines 7 to column 26, line 41 of Spies to disclose the recipient responding to the credential index by determining a service level according to the at least one credential indexed in the credential index and the recipient communicating the service level to the sender by using a certified trusted authority 26 of Fig. 1 to process participant data information. However, Fig. 1, and the description thereof, is concerned with the registration process that involves messages between authority 26 and participants 22. In the analysis of claim 1, the sender and recipients were 22(a) and 22(b), and there was no mention of authority 26. In other words the Examiner has inconsistently considered claims 1 and 3.

Claim 4 now requires the number of credential indices to exceed the number of credentials.

The Examiner is requested to indicate how Spies discloses the claim 5 requirement for the recipient to respond to the credential index by determining a service level according to each of the plurality of credential indices communicated to the recipient by the sender, and communicating the service level corresponding to at least one of the credential indices to the sender.

The combination of Spies et al. and Scheidt et al. to reject each of claims 6-16 is erroneous, *inter alia*, because one of ordinary skill in the art would not have combined the references for the reasons discussed *supra*.

Concerning claim 10, the Examiner is requested to indicate in detail how authority 26 of Spies et al. responds to an index communicated by the user by selecting at least one of the user provided credentials from the credential index provided by the user. The Examiner is also requested to indicate how authority 26 responds to the index communicated by the user so to then

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requested to explain where Spies et al. discloses a participant 22 responding to the indication of the selected credential by providing to authority 26 at least one credential corresponding to the selected credential, and how authority 26 responds to the credential corresponding to the selected credential provided to the user by authorizing the service to the user. Fig. 1 and the description thereof only disclose single a message being transmitted from each of participants 22 to authority 26, and a single message with an authorization from authority 26 to participants 22.

New claims 17-21 define features that are not disclosed or made obvious by the combination of Spies et al. and Scheidt et al. by defining operations that occur in response to the service provider determining that, based on the user's credentials, the user is not authorized to obtain the service the user is seeking.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance are respectfully requested and deemed in order.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 08-2025, and please credit any excess fees to such deposit account.

Respectfully submitted,

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